

REMARKS

The Office Action mailed June 6, 2003, has been carefully reviewed and the following remarks and amendment have been made in consequence thereof.

Subsequent to entry of the foregoing amendment, Claims 1-33, 35, and 36 will be pending in this application. Claims 1-36 are rejected. Claim 34 has been canceled.

The objection to the specification is respectfully traversed. Specifically, paragraph [0024] has been amended to remove references to Figure 7 and now recites "shown in Figure 6". Accordingly, for the reasons set forth above, Applicant respectfully requests the objection to the specification be withdrawn.

The rejection of Claims 11 and 23 under 35 U.S.C. § 112, first paragraph, is respectfully traversed. Specifically, Claims 11 and 23 have each been amended to recite "said necked-down section has a maximum diameter that is smaller in diameter to than said first end and said second end." Accordingly, for at least the reasons set forth above, Applicant respectfully requests the Section 112 rejections of Claims 11 and 23 be withdrawn.

The rejection of Claims 1-23 and 31-36 under 35 U.S.C. § 103 as being unpatentable over Leahy (U.S. Pat. No. 6,308,927) in view of Herrstrorm (U.S. Pat. No. 4,737,048) is respectfully traversed.

Leahy describes a breakaway sign post connector 14 that includes a shear member 24 and a resilient bushing 26. Shear member 24 includes a first threaded end 28, a second threaded end 30, and a necked down section 50 that is intermediate first and second ends 28 and 30, respectively. An annular shoulder 34 extends outward from second end 30, and bushing 26 is positioned circumferentially around shear member 24 and over shoulder 34. When attached to an anchor plate 20 and a support plate 18 for a sign post, bushing 26 facilitates strengthening post connector 14 to resist wind shear, while still allowing shear member 24 to fracture through necked down section 50 at a predetermined impact load.

Herrstrorm describes a road sign attachment and repair apparatus 10 that enables a sign post 11 embedded in the ground to be attached to a top post 10 which has a sign attached

thereto. Apparatus 10 includes a first U-shaped bracket 14 that is coupled to a second U-shaped bracket 34 through four helical springs 50, 51, 52, and 53. When fully assembled, apparatus 10 supports sign post 12 in a substantially vertical position, and springs 50-53 enable post 12 to bend over when contacted by a vehicle 13. Accordingly, because springs 50-53 bias post 12, sign post 12 is returned to a vertical position when the vehicle is no longer contacting sign post 12. Accordingly, apparatus 10 enables a wooden sign post 11 and 12 to be reassembled and repaired after a portion has been broken off.

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to combine Leahy with Herrstrom. More specifically, it is respectfully submitted that a *prima facie* case of obviousness has not been established. As explained by the Federal Circuit, "to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the Applicant." In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

Moreover, the Federal Circuit has determined that:

[I]t is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Further, under Section 103, "it is impermissible . . . to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." In re Wesslau, 147 USPQ 391, 393 (CCPA 1965). Rather, there must be some suggestion, outside of Applicant's disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a

suggestion nor motivation to combine the cited art, nor any reasonable expectation of success has been shown.

Although it is asserted within the Office Action that Leahy teach the present invention except for disclosing a helical spring surrounding the shear member, and that Herrstorm teaches a plurality of helical springs used with a resilient sign post attachment, no motivation nor suggestion to combine the cited art has been shown. Rather, Leahy teaches away from Herrstorm by describing a breakaway connector that includes a shear member that includes a necked down portion that is designed to break or shear when subjected to a pre-determined impact, and in contrast, Herrstorm does not suggest nor describe a connector including any member that is designed to shear when subjected to a pre-determined impact. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicant requests that the Section 103 rejection of Claims 1-23 and 31-36 be withdrawn.

If art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. More specifically, Applicant respectfully submits that Leahy teaches away from Herrstorm, and as such, the combination of Leahy and Herrstorm also teach away from the present invention, thus supporting the nonobviousness of the present invention. Consequently, the presently pending claims are patentably distinguishable from the cited combination.

Claim 1 recites a breakaway signpost connector for attaching a sign support member to an anchor member, wherein the connector comprises "a shear member having a first end, a second end, and a necked down section between said first and second ends...a spring surrounding said shear member and supporting said necked-down section."

Neither Leahy nor Herrstorm considered alone or in combination, describes or suggests a breakaway signpost connector which includes a shear member having a first end, a second end, and a necked down section between the first and second ends, in combination with a spring surrounding the shear member for supporting the necked-down section. Specifically, no combination of Leahy or Herrstorm describes or suggests a spring surrounding a shear member for supporting a necked-down section. Rather in contrast to the present invention, Leahy describes extending only a bushing around the necked-down section, and Herrstorm describes a connector assembly that does not include a shear member, nor a spring that extends around anything. For the reasons set forth above, Claim 1 is submitted to be patentable over Leahy in view of Herrstorm.

Claims 2-11 depend directly or indirectly from independent Claim 1. When the recitations of Claims 2-11 are considered in combination with the recitations of Claim 1, Applicant submits that Claims 2-11 are likewise patentable over Leahy in view of Herrstorm.

Claim 12 recites a breakaway sign post assembly comprising "a shear bolt comprising a threaded first end, a second end, and a necked-down section, said necked-down section separating said first end and said second end...said second end comprising a shoulder...a spring surrounding said bolt and said shoulder...." Neither Leahy nor Herrstorm considered alone or in combination, describes or suggests a breakaway sign post assembly which includes a shear bolt having a threaded first end, a second end, and a necked-down section that separates the first and second ends, wherein the second end includes a shoulder, in combination with a spring surrounding the bolt and shoulder. Specifically, no combination of Leahy or Herrstorm describes or suggests a spring surrounding a bolt and a shoulder. Rather in contrast to the present invention, Leahy describes extending only a bushing around the necked-down section, and Herrstorm describes a connector assembly that does not include a shear member, nor a spring that extends around anything. For the reasons set forth above, Claim 12 is submitted to be patentable over Leahy in view of Herrstorm.

Claims 13-23 depend directly or indirectly from independent Claim 12. When the recitations of Claims 13-23 are considered in combination with the recitations of Claim 12, Applicant submits that Claims 13-23 are likewise patentable over Leahy in view of Herrstorm.

Claim 31 recites an anchor member for installing a sign support member and a breakaway signpost connector that includes a shear bolt and a spring, wherein the anchor member comprises "a ground member comprising a first end...an anchor plate coupled to said ground member at said first end such that said anchor plate and said first end wall form a recess within said first end of said ground member...said recess sized and shaped to at least partially receive the spring such that the spring extends circumferentially within the recess and around a necked down portion of the shear bolt."

Neither Leahy nor Herrstorm considered alone or in combination, describes or suggests an anchor member for installing a sign support member and a breakaway signpost connector that includes a shear bolt and a spring, wherein the anchor member includes a ground member having a first end, and an anchor plate coupled to the ground member first end such that the anchor plate and the first end wall form a recess within the first end, wherein the recess is sized and shaped to at least partially receive the spring such that the spring extends circumferentially within the recess and around a necked down portion of the shear bolt. Specifically, no combination of Leahy or Herrstorm describes or suggests a breakaway signpost connector that includes a shear bolt and a spring, in combination with a recess that is sized and shaped to at least partially receive the spring such that the spring extends circumferentially within the recess and around a necked down portion of the shear bolt. Rather in contrast to the present invention, Leahy describes extending only a bushing around the necked-down section, and Herrstorm describes a connector assembly that does not include a shear member, nor a spring that extends around anything. For the reasons set forth above, Claim 31 is submitted to be patentable over Leahy in view of Herrstorm.

Claim 34 has been canceled. Claims 32, 33, 35, and 36 depend directly or indirectly from independent Claim 31. When the recitations of Claims 32, 33, 35, and 36 are considered in combination with the recitations of Claim 31, Applicant submits that Claims 32, 33, 35, and 36 are likewise patentable over Leahy in view of Herrstorm.

For the reasons set forth above, Applicant requests that the Section 103 rejection of claims 1-23 and 31-36 be withdrawn.

The rejection of Claims 24-30 under 35 U.S.C. § 103 as being unpatentable over Leahy (U.S. Pat. No. 6,308,927) in view of Herrstrom (U.S. Pat. No. 4,737,048) is respectfully traversed.

Leahy and Herrstrom are described above. Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to combine Leahy with Herrstrom. More specifically, it is respectfully submitted that a *prima facie* case of obviousness has not been established. As explained by the Federal Circuit, "to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the Applicant." In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

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nor suggestion to combine the cited art has been shown. Rather, Leahy teaches away from Herrstorm by describing a breakaway connector that includes a shear member that includes a necked down portion that is designed to break or shear when subjected to a pre-determined impact, and in contrast, Herrstorm does not suggest nor describe a connector including any member that is designed to shear when subjected to a pre-determined impact. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicant requests that the Section 103 rejection of Claims 1-23 and 31-36 be withdrawn.

If art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. More specifically, Applicant respectfully submits that Leahy teaches away from Herrstorm, and as such, the combination of Leahy and Herrstorm also teach away from the present invention, thus supporting the nonobviousness of the present invention. Consequently, the presently pending claims are patentably distinguishable from the cited combination.

Claim 24 recites a method for assembling a breakaway signpost, the signpost including an anchor member, a support member, a shear member, a spring, wherein the shear member includes a necked-down section between a first end and a second end, and wherein the method comprises extending the first end of the shear member through the opening of the anchor plate...attaching the shear member to the anchor plate...inserting the spring over the shear member...."

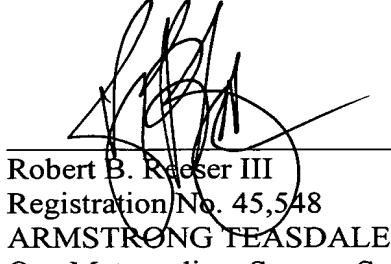
Neither Leahy nor Herrstorm considered alone or in combination, describes or suggests a method for assembling a breakaway signpost, wherein the signpost includes an anchor member, a support member, a shear member, a spring, and wherein the shear member includes a necked-down section between a first end and a second end, in combination with method steps including extending the first end of the shear member through the opening of

the anchor plate, attaching the shear member to the anchor plate, and inserting the spring over the shear member. Specifically, no combination of Leahy or Herrstorm describes or suggests inserting a spring over and around a shear member. Rather in contrast to the present invention, Leahy describes extending only a bushing around the necked-down section, and Herrstorm describes a connector assembly that does not include a shear member, nor a spring that extends around anything. For the reasons set forth above, Claim 24 is submitted to be patentable over Leahy in view of Herrstorm.

Claims 25-30 depend directly or indirectly from independent Claim 24. When the recitations of Claims 25-30 are considered in combination with the recitations of Claim 24, Applicant submits that Claims 25-30 are likewise patentable over Leahy in view of Herrstorm.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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